

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. – 37. (Cancelled)

38. (Currently amended) A method of enhancing a leukocyte mediated or immunoglobulin mediated ~~an~~ immune response ~~in a mammal~~ to a vaccine against an infectious disease in a mammal in need thereof, comprising administering to ~~a mammalian subject~~ the mammal a therapeutically effective amount of Escherichia coli heat labile enterotoxin B subunit (EtxB), wherein the EtxB is free from whole toxin and is not linked to an antigen.

39. (Previously presented) The method according to claim 38, wherein the EtxB increases the levels of B and T cell lymphocyte response.

40. (Previously presented) The method according to claim 38, wherein the antigen is a virus antigen from the herpes virus family.

41. (Previously presented) The method according to claim 40, wherein the virus antigen is an antigen of a virus selected from the group consisting of Herpes Simplex Virus-1 (HSV-1), Herpes Simplex Virus-2 (HSV-2), Epstein-Barr Virus (EBV), Varicella-zoster Virus (VZV), Cytomegalovirus (CMV), Human Herpes Virus-6 (HHV-6), Human Herpes Virus-7 (HHV-7) and Human Herpes Virus-8 (HHV-8).

42. (Previously presented) The method according to claim 41, wherein the virus antigen is an antigen of a virus selected from the group consisting of HSV-1, HSV-2, CMV or EBV.

43. (Currently amended) The method according to claim 38, wherein the said EtxB is administered to the said mammalian subject in conjunction with administration of an antigen, and wherein the EtxB is not linked to the antigen[[],].

44. (Previously presented) The method according to claim 43, wherein the said EtxB and antigen are administered to the said mammalian subject in an amount which is effective to increase the mammalian subject's levels of B and T cell lymphocyte response to the antigen.
45. (Previously presented) The method according to claim 44, wherein the said EtxB and antigen are co-administered to the said mammalian subject.
46. (Currently amended) The method according to claim 41, wherein the said EtxB is administered to the said mammalian subject in conjunction with administration the virus antigen, and wherein the EtxB is not linked to the antigen[[],].
47. (Previously presented) The method according to claim 46, wherein the said EtxB and virus antigen are administered to the said mammalian subject in an amount which is effective to increase the mammalian subject's levels of B and T cell lymphocyte response to the antigen.
48. (Previously presented) The method according to claim 47, wherein the said EtxB and virus antigen are co-administered to the said mammalian subject.
49. (Currently amended) A method of enhancing a leukocyte mediated or immunoglobulin mediated ~~an~~ immune response ~~in a mammal~~ to a vaccine against an infectious disease in a mammal in need thereof, comprising administering Escherichia coli heat labile enterotoxin B subunit (EtxB) in conjunction with administration of an antigen associated with an infectious disease, wherein the EtxB is free from whole toxin and is not linked to the antigen, to a ~~mammalian subject~~ the mammal in an amount which is effective to increase the mammalian subject's levels of B and T cell lymphocyte response to the antigen.
50. (Previously presented) The method according to claim 49, wherein the antigen is a virus antigen from the herpes virus family.
51. (Previously presented) The method according to claim 50, wherein the virus antigen is an antigen of a virus selected from the group consisting of Herpes Simplex Virus-1 (HSV-1),

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Herpes Simplex Virus-2 (HSV-2), Epstein-Barr Virus (EBV), Varicella-zoster Virus (VZV), Cytomegalovirus (CMV), Human Herpes Virus-6 (HHV-6), Human Herpes Virus-7 (HHV-7) and Human Herpes Virus-8 (HHV-8).

52. (Previously presented) The method according to claim 51, wherein the virus antigen is an antigen of a virus selected from the group consisting of HSV-1, HSV-2, CMV or EBV.

53. (Previously presented) The method according to claim 51, wherein the said EtxB and virus antigen are co-administered to the said mammalian subject.